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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/044,807

DATE: 01/30/2002 TIME: 15:44:46

Input Set : A:\LEX-0298-USA SEQLIST.txt
Output Set: N:\CRF3\01302002\J044807.raw

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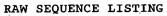
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4 <110> APPLICANT: Yu, Xuanchuan
              Turner, C. Alexander Jr.
      7 <120> TITLE OF INVENTION: Novel Human Protease and Polynucleotides Encoding the Same
      9 <130> FILE REFERENCE: LEX-0298-USA
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/044,807
C--> 11 <141> CURRENT FILING DATE: 2002-01-11
     11 <150> PRIOR APPLICATION NUMBER: US 60/261,684
     12 <151> PRIOR FILING DATE: 2001-01-12
     14 <160> NUMBER OF SEQ ID NOS: 2
     16 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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     20 <212> TYPE: DNA
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     25 ctgagttcca ggaccgcacg ctccgaggag gaccgggacg gcctatggga tgcctggggc
                                                                               120
     26 ccatggagtg aatgctcacg cacctgcggg ggtggggcct cctactctct gaggcgctgc
                                                                               180
     27 ctgagcagca agagctgtga aggaagaaat atccgataca gaacatgcag taatgtggac
                                                                               240
                                                                               300
    28 tgcccaccag aagcaggtga tttccgagct cagcaatgct cagctcataa tgatgtcaag
                                                                               360
    29 caccatggcc agttttatga atggcttcct gtgtctaatg accctgacaa cccatgttca
     30 ctcaagtgcc aagccaaagg aacaaccctg gttgttgaac tagcacctaa ggtcttagat
                                                                               420
    31 ggtacgcgtt gctatacaga atctttggat atgtgcatca gtggtttatg ccaaattgtt
                                                                               480
    32 ggctgcgatc accagctggg aagcaccgtc aaggaagata actgtggggt ctgcaacgga
                                                                               540
    33 gatgggtcca cctgccggct ggtccgaggg cagtataaat cccagctctc cgcaaccaaa
                                                                               600
     34 toggatgata otgtggttgo aattooctat ggaagtagao atattogoot tgtottaaaa
                                                                               660
                                                                               720
    35 ggtcctgatc acttatatct ggaaaccaaa accctccagg ggactaaagg tgaaaacagt
                                                                               780
    36 ctcageteca caggaacttt cettgtggae aattetagtg tggaetteca gaaattteca
                                                                               840
    37 gacaaagaga tactgagaat ggctggacca ctcacagcag atttcattgt caagattcgt
    38 aacteggget eegetgacag tacagteeag tteatettet ateaacceat catecacega
                                                                               900
    39 tggagggaga cggatttett teettgetea geaacetgtg gaggaggtta teagetgaea
                                                                               960
    40 toggotgagt gotacgatot gaggagcaac cgtgtggttg ctgaccaata ctgtcactat
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    41 tacccagaga acatcaaacc caaacccaag cttcaggagt gcaacttgga tccttgtcca.
                                                                              1080
    42 gccagtgacg gatacaagca gatcatgcct tatgacctct accatcccct tcctcggtgg
                                                                              1140
    43 gaggecaece catggacege gtgeteetee tegtgtgggg ggggeateea gageegggea
                                                                              1200
    44 gtttcctgtg tggaggagga catccagggg catgtcactt cagtggaaga gtggaaatgc
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    45 atgtacaccc ctaagatgcc catcgcgcag ccctgcaaca tttttgactg ccctaaatgg
                                                                              1320
    46 ctggcacagg agtggtctcc gtgcacagtg acatgtggcc agggcctcag ataccgtgtg
                                                                              1380
    47 gtcctctqca tcqaccatcq aggaatqcac acaggaggct gtagcccaaa aacaaagccc
                                                                              1440
    48 cacataaaaq aggaatgcat cgtacccact ccctgctata aacccaaaga gaaacttcca
                                                                              1500
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50 teagaggage cetegtteat eccagaggee tggteggeet geacagteae etgtggtgtg

51 gggacccagg tgcgaatagt caggtgccag gtgctcctgt ctttctctca gtccgtggct

1620

1680



PATENT APPLICATION: US/10/044,807

DATE: 01/30/2002 TIME: 15:44:46

Input Set : A:\LEX-0298-USA SEQLIST.txt
Output Set: N:\CRF3\01302002\J044807.raw

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			tcctgagttc				1800
			gctgtatgac				1860
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56			gtgcgtgacc				1980
57			agcaaggtgg				2040
58			gaccagagac				2100
			ggctgatgag				2160
			ttgccccca				2220
			tgttcagaaa				2280
			tcctgagacc				2340
			ctgtcccagc				2400
			cacccagact				2460
			caattccacc				2520
			aacctgtgca				2580
			gaaggtctac				2640
			ctacctgctc				2700
			cctcatcacc				2760
			ccccttcggc				2820
			ctcagcgggc				2880
			cgtggcccgg				2940
			cccgaaggag				3000
			ggcggagaag				3060
			gctgctggag				3120
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.79	gtggcccagc	tggcccagga	gatcttccgc	agccacctgg	agcaccagga	cacgctcctg	3360
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81	ttcagcagct	ccctgcggac	ctcctccacc	ggggacgccg	ggggaggctc	tcgaaggcca	3480
82	caccgcaagc	ccaccatcct	gcgcaagatc	tcagcggccc	agcagctctc	agcctcggag	3540
83	gtggtcaccc	acctggggca	gacggtggcc	ctggccagcg	ggacactgag	tgttcttctg	3600
84	cactgtgagg	ccatcggcca	cccaaggcct	accatcagct	gggccaggaa	tggagaagaa	3660
85	gttcagttca	gtgacaggat	tcttctacag	ccagatgatt	ccttacagat	cttggcacca	3720
86	gtggaagcag	atgtgggttt	ctacacttgc	aatgccacca	atgccttggg	atacgactct	3780
87	gtctccattg	ccgtcacatt	agcaggaaag	ccactagtga	aaacgtcacg	aatgacagtg	3840
			agtcacagtc				3900
89	ggagtgaatg	tgacaatcaa	ctgccaggtt	gcaggagtgc	ctgaagctga	agtcacttgg	3960
90	ttcaggaata	aaagcaaact	gggctccccg	caccatctgc	acgaaggctc	cttgctgctc	4020
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92	gagctgactg	agagcaccca	gctgctgatc	ctagatcccc	cccaagtccc	cacacagttg	4140
			cgctgccact				4200
			cctggatcct				4260
			tatcacctgg				4320
			cttggcagct				4380
			cagctgcctt				4440
			agattactgg				4500
			ggttcagcag				4560
100) gaggtcaaco	c ctgcccactg	g cgcagggaag	g gttegeeetg	g cggtgcagco	catcgcgtgc	4620

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101	aaco	eggag	gag a	actgo	cctt	c to	eggte	gate	gt	gacct	tcct	ggto	ctgc	ctg t	tacco	ggagc	4680
102	tgt	gggg	gag g	gtgt	ccaga	ac co	egcag	gggtg	g acc	ctgto	caaa	agct	gaaa	agc o	ctct	ggatc	4740
103	tcca	accc	ctg t	gtc	caate	ga ca	atgt	gcaco	cag	ggtc	gcca	agc	ggcct	tgt 🤉	ggaca	acccag	4800
104	gcct	tgtaa	acc a	agcag	gctgi	tg to	gtgga	agtgg	g gco	cttct	tcca	gct	gggg	cca g	gtgca	atggg	4860
105	cctt	tgcat	cg g	gcct	tcaco	ct ag	gctgt	tgcaa	a cad	cagao	caag	tctt	ctg	cca g	gacad	gggat	4920
106	ggca	atcad	cct 1	cacca	atcag	ga go	cagto	gcagt	gct:	tctt	ccga	ggc	ctgt	gag (cacco	cagaac	4980
107	tgct	tggto	cag a	t taccatcaga gcagtgcagt gctcttccga g g aggcctgcag tgtacactgg agagtcagcc										cct q	gtgca	acagct	5040
108	acct	gtg	gca a	a actacggett ccagtecegg egtgtggagt gtgtgcatge eegcaccaac													
109	aagg	gcagt	tgc ctgagcacct gtgctcctgg gggccccggc ctgccaactg gcagcgctgc												5160		
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111	aaad	caget	.ga a	acto	etge	ca ac	ctcag	gccag	tt1	caaat	tctc	gct	gctgi	tgg a	aactt	gtggc	5280
	aaaq				_												5289
	<210			ON C	: 2												
	<21																
	<212																
					homo	sap	oiens	3									
	<400					-											
						Arg	Ala	Thr	Pro	Gly	Thr	Leu	Leu	Leu	Phe	Leu	•
123	1		•		5					10				4.	15		
	Ala	Phe	Leu	Leu	Leu	Ser	Ser	Arq	Thr	Ala	Arg	Ser	Glu	Glu	Asp	Arg	
125				20				_	25		-			30	_	-	•
	Asp	Glv	Leu	Trp	Asp	Ala	Trp	Gly	Pro	Trp	Ser	Glu	Cys	Ser	Arg	Thr	
127		1	35				-	40		-			45		_		
	Cvs	Glv	Glv	Glv	Ala	Ser	Tvr	Ser	Leu	Arq	Arq	Cys	Leu	Ser	Ser	Lys	
129	010	50	1	1			55	-		-	•	60				-	
	Ser		Glu	Glv	Ara	Asn		Ara	Tvr	Ara	Thr	Cvs	Ser	Asn	Val	Asp	
131		0,0	0	0-1	9	70		5	- 1 -	5	75	•				80	
		Pro	Pro	Glu	Ala	Gly	Asp	Phe	Ara	Ala	Gln	Gln	Cvs	Ser	Ala	His	
133	O _I D	110			85	0-1			5	90			- 4 -		95		
	Asn	Asp	Va 1	Lvs		His	Glv	Gln	Phe	Tvr	Glu	Trp	Leu	Pro	Val	Ser	
135	11011	1,00		100			0-1		105	-1-				110			
	Asn	Asp	Pro		Asn	Pro	Cvs	Ser		Lvs	Cvs	Gln	Ala	Lvs	Glv	Thr	
137			115	F			-1-	120			- 4		125	-	•	•	
	Thr	Len		Va l	Glu	Leu	Ala		Lvs	Val	Leu	Asp	Gly	Thr	Arq	Cys	
139	11	130		, 42	014		135		-1-			140				-	
	Tur		Glu	Ser	Len	Asp		Cvs	Tle	Ser	Glv		Cvs	Gln	Ile	Val	
	145	1 111	OIU.	JCI	пси	150	1100	0,0		501	155		-1-			160	
		Cve	Aen	Hic	Gln	Leu	Glv	Ser	Thr	Val		G111	Asp	Asn	Cvs		
143	GIY	Cys	изБ	птэ	165	цец	OLY	DCI	1111	170		014			175	0-1	
	17 a 1	Cvc	λen	<i>C</i> 177		Gly	Sar	Thr	Cvc		T.e.ii	Val	Arσ	Glv		Tvr	
	vaı	Суз	ASII	180		GLY	Ser	1111	185	mrg	LCu	, u _	**** 9	190	01	-1-	
145	Tva	Con	Cln			Ala	Thr	Luc		λen	λen	Thr	Va 1		Δla	Tle	
	пуз	26L	195	ьец	ser	нта	TIIT	цуS 200	Ser	vəħ	vəħ	T 11T	205	, u T	лти	110	
147	Dmo	Ш		Com	7 22	II i a	T10		Tou	17a 1	LOU	Twe		Dro	λen	Vic	
	PLO		стХ	ser.	Arg	His	215	AIG	пeп	νа⊥	ьeu	220	сту	ĖIU	чэЬ	1113	
149	T 6	210	T 0	c1	mb∽	Lys		Lou	C1 ~	C117	Thr	-	G1 17	Glu	Δen	Ser	
		T À T,	ьеи	GTU	TIIT	230	TIIT	ьeu			235	nys	GTÅ	GIU	นวแ	240	
	225	Co~	C-~	mh~	C1		Dho	T 011	v.l			Ser	Ser	₩a 1	Δen		•
	ьeu	ser	ser	THE		Thr	rne	neu	val		ASII	261	Ser	Val	255	FIIE	
153					245					250					200		

RAW SEQUENCE LISTING

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Input Set : A:\LEX-0298-USA SEQLIST.txt
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154 155	Gln	Lys	Phe	Pro 260	Asp	Lys	Glu	Ile	Leu 265	Arg	Met	Ala	Gly	Pro 270	Leu	Thr
	Ala	Asp	Phe 275	Ile	Val	Lys	Ile	Arg 280	Asn	Ser	Gly	Ser	Ala 285	Asp	Ser	Thr
158	Val			Ile	Phe	Tyr			Ile	Ile	His			Arg	Glu	Thr
159 160	Asp	290 Phe	Phe	Pro	Cys	Ser	295 Ala	Thr	Cys	Gly	Gly	300 Gly	Tyr	Gln	Leu	Thr
	305					310					315					320
162 163	Ser	Ala		Cys ·•·	Tyr 325	Asp	Leu	Arg	Ser	Asn 330	Arg	Val	Val	Ala	Asp 335	GIn
164 165	Tyr	Cys	His	Tyr 340	Tyr	Pro	Glu	Asn	Ile 345	Lys	Pro	Lys	Pro	Lys 350	Leu	Gln
	Glu	Cvs	Asn	Leu	Asp	Pro	Cvs	Pro		Ser	Asp	Gly	Tyr		Gln	Ile
167		1	355		•		-	360			-	-	365	-		
168 169	Met	Pro 370	Tyr	Asp	Leu	Tyr	His 375	Pro	Leu	Pro	Arg	Trp 380	Glu	Ala	Thr	Pro
	Trp		Ala	Cys	Ser	Ser		Cys	Gly	Gly	Gly	Ile	Gln	Ser	Arg	Ala
171	385					390					395					400
	Val	Ser	Cys	Val		Glu	Asp	Ile	Gln		His	Val	Thr	Ser		Glu
173	· _	_	_	_	405	_		_	_	410	_		- 1	a 1	415	~
175		_	_	Cys 420		_			425					430		
176 177	Asn	Ile	Phe 435	Asp	Cys	Pro	Lys	Trp 440	Leu	Ala	Gln	Glu	Trp 445	Ser	Pro	Cys
178	Thr	Val	Thr	Cys	Gly	Gln	Gly	Leu	Arg	Tyr	Arg	Val	Val	Leu	Cys	Ile
179		450					455					460				
		His	Arg	Gly	Met		Thr	Gly	Gly	Cys		Pro	Lys	Thr	Lys	
	465	 1	_	a 1	~1	470	~1 -	**- 7	D	ml	475	2	m	T	D	480
182	HIS	тте	ьуs	Glu	485	Cys	тте	vai	Pro	490	Pro	Cys	TYL	гаг	495	
	Glu	T.v.c	T.Q11	Pro		Glu	Δla	T.vs	Leu			Phe	Lvs	Gln		
185	OLU	цуз	пси	500	,	OLU	1114	L , 5	505	110	P	1 110	2,5	510		0111
	Glu	Leu	Glu	Glu	Gly	Ala	Ala	Val	Ser	Glu	Glu	Pro	Ser	Phe	Ile	Pro
187			515					520	•				525			
	Glu		\mathtt{Trp}	Ser	Ala	Cys		Val	Thr	Cys	Gly		Gly	Thr	Gln	Val
189	_	530	** . 1	.	a		535	.	.	a	Dh.	540		a	17 T	31.
		Пе	vaı	Arg	Cys	550	vaı	Leu	Leu	ser	555	ser	GIN	ser	vaı	.560
	545	Lou	Dro	Ile	λen		Cve	Glu	Glv	Dro		Pro	Δla	Ser	Gln	
193		пец		116							цуз		AIG		.575	
		Cys		Ala									Glu			
195		-	-	580	-		•		585					590		
196	Asp	Glu	Thr	Asp	Gly	Leu	Phe	Gly	Gly	Leu	Gln	Asp	Phe	Asp	Glu	Leu
197			595					600					605			
	Tyr		${\tt Trp}$	Glu	Tyr	Glu		Phe	Thr	Lys	Cys		Glu	Ser	Cys	Gly
199	a 3	610					615	*** *		a -	.	620	T	01	m l	3
	_	GTA	Val	Gln	Glu		val	val	ser	cys	Ļeu 635	Asn	гàг	GIN	Tnr	Arg 640
201		Dro	λls	Glu	Glu	630	Len	Cve	Va 1	Thr		Δτα	Δra	Pro	Pro	
202	JIU	FIO	та	GIU	JIU	וומח	Ti-Cit	CYS	v u I	* ***		**** 9	9		0	O ± 11

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205				660					665					670		
206	Gly	Lys	${\tt Trp}$	Ser	Pro	Cys	Ser		Thr	Cys	Gly	Val	Gly	Leu	Gln	Thr
207			675					680					685			
208	Arg	Asp	Val	Phe	Cys	Ser	His	Leu	Leu	Ser	Arg	Glu	Met	Asn	Glu	Thr
209		690					695					700				
210	Val	Ile	Leu	Ala	Asp	Glu	Leu	Cys	Arg	Gln	Pro	Lys	Pro	Ser	Thr	Val
211	705					710					715					720
212	Gln	Ala	Cys	Asn	Arg	Phe	Asn	Cys	Pro	Pro	Ala	Trp	Tyr	Pro	Ala	Gln
213			_		725			_		730					735	
214	Trp	Gln	Pro	Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Val	Gln	Lys	Arg	Glu
215	_			740		_		_	745	_	_			750	_	
216	Val	Leu	Cys	Lys	Gln	Arg	Met	Ala	Asp	Gly	Ser	Phe	Leu	Glu	Leu	Pro
217			755	-				760	_	_			765			
218	Glu	Thr	Phe	Cys	Ser	Ala	Ser	Lys	Pro	Ala	Cys	Gln	Gln	Ala	Cys	Lys
219		770		•			775	•			-	780			-	-
220	Lys	Asp	Asp	Cys	Pro	Ser	Glu	Trp	Leu	Leu	Ser	Asp	Trp	Thr	Glu	Cys
	785	-	-	-		790		•			795	-	-			800
222	Ser	Thr	Ser	Cys	Gly	Glu	Gly	Thr	Gln	Thr	Arq	Ser	Ala	Ile	Cys	Arq
223				-	805		_			810	,				815	_
	Lys	Met	Leu	Lvs	Thr	Glv	Leu	Ser	Thr		Val	Asn	Ser	Thr	Leu	Cvs
225	-1-			820		1			825					830		- 2 -
	Pro	Pro	Leu	Pro	Phe	Ser	Ser	Ser	Ile	Arg	Pro'	Cvs	Met	Leu	Ala	Thr
227			835					840				-1-	845			
	Cys	Ala		Pro	Glv	Ara	Pro		Thr	Lvs	His	Ser		His	Ile	Ala
229	-1-	850			1	5	855			1-		860				
	Ala		Ara	Lvs	۷a l	Tvr		Gln	Thr	Ara	Ara	Gln	Ara	Lvs	Leu	His
231			ر	-1-		870				,	875		,	-1-		880
	Phe	Va1	Va1	Glv	Glv		Ala	Tvr	Leu	Leu		Lvs	Thr	Ala	Val	
233				1	885			-1-		890		-1-			895	
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235		5	-1-	900		5	,		905	-1-				910		
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237	-1-		915					920					925			
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241			0,0	001		950			**** 9	014	955				2,5	960
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243		011	011		965					970	110	Deu	001	110	975	JUL
	Glu	Glu	Glu	Va 1		Δla	Glv	Δrσ	T.vc		Glv	Pro	T.v.c	Glu		T.eu
245	OIU	Olu	ΟIu	980	LCu	niu	OLY	1119	985	OI,	O _I	110	נענם	990	****	пси
	Gln	Thr	иiс		Hic	Gln	Δen	Glv		Dhe	Ser	Δcn	Glv		T.vc	Δla
247	0111	T 11T	995	פענה	1113	9 ±11	กงแ	1000		1 116	JUL	11011	1005		Lys	. Tu
	Glu	Lvc		Glv	Len	Δla	Δla			Glv	Ser	Ara			Asn	Len
249	JIU	1010		<u>-</u> -у	an C U	***U	1015		110	0 ± 1	501	1020				Lou
	Va 1			Len	Len	Glu			Glv	Trn	Pro			Len	Len	Ala
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VERIFICATION SUMMARY

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L:11 M:270 C: Current Application Number differs, Replaced Current Application No L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date